



Report to the Chairman and Ranking
Minority Member, Committee on Armed
Services, Subcommittee on Readiness
and Management Support, U.S. Senate

April 2000

ACQUISITION REFORM

DOD's Guidance on Using Section 845 Agreements Could be Improved



DISTRIBUTION STATEMENT A
Approved for Public Release
Distribution Unlimited

20000410 064



GAO

Integrity • Objectivity • Reliability

Contents

Letter	3
--------	---

Appendixes	
Appendix I: Treatment of Selected Issues Under Section 845 Agreements	38
Appendix II: Comments From the Department of Defense	51
Appendix III: GAO Contacts and Staff Acknowledgments	55

Tables	
Table 1: DOD's Use of Section 845 Agreements Through Fiscal Year 1998	8
Table 2: Ten Largest Section 845 Agreements Measured by DOD Financial Commitment as of December 1998	11
Table 3: Accounting Requirements	40
Table 4: Pricing-Related Issues	41
Table 5: Audit Approaches	42
Table 6: Financing Approaches	43
Table 7: Financing-Related Issues	44
Table 8: Termination Procedures	45
Table 9: Dispute Procedures	46
Table 10: Patent and Data Right Approaches	48
Table 11: Government Property Approaches	49
Table 12: Subcontractor-Related Requirements	50

Figures	
Figure 1: Distribution of Section 845 Agreements by Total Agreement Dollar Value	10
Figure 2: Reasons Cited by DOD Components for Using Section 845 Agreements	13
Figure 3: Composition of Prime Contractors Awarded Section 845 Agreements	15

Abbreviations

DARPA	Defense Advanced Research Projects Agency
DOD	Department of Defense



United States General Accounting Office
Washington, D.C. 20548

National Security and
International Affairs Division

B-281276

April 7, 2000

The Honorable James M. Inhofe
Chairman
The Honorable Charles S. Robb
Ranking Minority Member
Subcommittee on Readiness and Management Support
Committee on Armed Services
United States Senate

To help meet the national security challenges of the 21st century, the Department of Defense (DOD) funds a vast array of research and development activities to exploit emerging technologies, develop advanced weapon systems, and improve the capabilities of fielded weapon systems. Over the past decade, Congress and DOD expressed concern that government-unique procurement requirements—often implemented through specified contract provisions—inhibited DOD's ability to take advantage of technological advances made by the private sector and increased the costs of goods and services DOD acquired.

One effort to address these concerns was enacted under Section 845 of the National Defense Authorization Act for Fiscal Year 1994. Section 845 provided the Defense Advanced Research Projects Agency¹ with temporary authority to enter into agreements for prototype projects² using nonstandard contracting approaches referred to as "other transactions." Other transactions are generally not subject to the federal laws and regulations governing standard procurement contracts. Consequently, when using Section 845 authority, DOD contracting officials are not required to include standard contract provisions that typically address such issues as financial management or intellectual property rights, but rather may structure the agreements as they consider appropriate. In 1996, Congress extended the use of Section 845 agreements to the military

¹ The Defense Advanced Research Projects Agency is DOD's central research and development organization.

² There is no common definition of a prototype project; however, definitions provided by DOD ranged from products that evaluated the technical feasibility or operational utility of a concept or system, to lesser projects involving subsystems, components, technology demonstrations, and other technology development efforts.

services and other defense agencies. Section 845 authority expires on September 30, 2001.

You asked us to provide information regarding DOD's use of Section 845 agreements to assist you in deciding whether to make the authority permanent. Specifically, we identified (1) the extent to which DOD has used Section 845 agreements, (2) the benefits reported from their use, (3) how DOD tailored these agreements to address issues normally governed by standard contract provisions, and (4) recent DOD efforts to provide additional guidance on their use.

Results in Brief

DOD has awarded 97 Section 845 agreements as of October 1998. These agreements have varied widely in type and dollar value. They were most frequently used to support studies of future weapon systems or to design and develop subsystems or components. DOD's financial commitment was concentrated on 10 agreements that accounted for about \$2.1 billion, or more than 80 percent, of the \$2.6 billion awarded under Section 845 agreements. This financial commitment constituted a relatively small percentage of DOD's overall research and development spending. For example, DOD awarded about \$100 billion in research and development contracts over approximately the same time period.

In a February 1999 report to Congress, DOD cited numerous benefits from using Section 845 authority. These benefits included attracting firms that typically did not contract with DOD,³ enabling use of commercial products or processes, providing more flexibility to negotiate agreement terms and conditions, and reducing program costs. However, the report provided only limited data to assess the agreements' usefulness. For one of the key benefits expected from using Section 845 agreements—attracting commercial firms—data showed mixed results. For example, in our review, traditional DOD prime contractors attracted commercial firms as subcontractors in 24 out of 84 agreements, according to agreement officers.

Section 845 agreements covered most of the areas typically addressed by standard contract provisions in the five areas we evaluated. However, the terms and conditions found in Section 845 agreements provided contractors more flexibility in the business processes and practices they

³ In this report, unless otherwise specified, we use the term "commercial firm" to identify those business entities that typically do not contract with DOD.

employed than typically provided by standard contract provisions. Among Section 845 agreements, we found little variation in the approaches to financial management, subcontractor management, and termination and disputes processes. In two other areas—intellectual property and government property—DOD officials made greater use of the standard contract clauses in agreements awarded to traditional defense contractors, while using tailored clauses in agreements with commercial firms. The use of a model agreement contributed to this uniformity, but DOD officials often did not address why they selected either the standard contract provision or a tailored approach or discuss the anticipated benefits of their choice of approach in the analysis justifying the award of the agreement.

DOD has recently proposed new guidance to assist its personnel in determining when to use a Section 845 agreement and how to structure key provisions. The guidance also calls for additional information that would provide senior acquisition executives better insight on selected terms and conditions for agreements involving major weapon systems. It requires that DOD personnel establish metrics to evaluate the benefits from using Section 845 agreements, but does not provide examples or guidelines to help them develop metrics that are measurable and directly related to the agreement's use. Experience has shown that DOD components have not developed such metrics in the past. Consequently, it is not clear that establishing this requirement without providing guidelines will lead to appropriate assessments of the benefits of using Section 845 agreements. The proposed guidance generated extensive comments within DOD and industry, which may be difficult to reconcile.

We have included recommendations in the report that are intended to assist DOD personnel in determining whether to use a Section 845 agreement and provide more useful indicators of the benefits obtained from their use.

Background

DOD obligated over \$100 billion for fiscal years 1994 through 1998 for research and development activities under various types of contracts. The policies and procedures that govern the solicitation, negotiation, and management of DOD contracts are contained in the Federal Acquisition Regulation and the Defense Federal Acquisition Regulation Supplement. Depending on such factors as the contract type and dollar value, a DOD contract could incorporate more than 100 contract clauses. These clauses implement statutory or regulatory requirements covering such issues as financial management and intellectual property, among others. While these requirements are intended to protect the government's or suppliers'

interests, concerns have been raised about the costs or impact of complying with the requirements. For example, traditional defense contractors report that they require additional personnel to comply with government financial management requirements, while commercial companies reportedly decline to accept DOD research contracts to protect their intellectual property. Many requirements can be waived or tailored, but DOD officials indicated this can be difficult and time consuming.

The origins of Section 845 authority began in 1989, when Congress enacted legislation—codified at 10 U.S.C. 2371—to provide the Defense Advanced Research Projects Agency (DARPA) temporary authority to enter into “other transactions” for advanced research projects. The legislation did not define “other transactions,” thus giving DARPA flexibility to deal with unique situations encountered when fostering technology development, especially technology with both commercial and military applications. In 1991, Congress made this authority permanent and subsequently extended it to the military services. Other transactions entered into under 10 U.S.C. 2371 are assistance instruments, which are instruments used by DOD when the principal purpose is to stimulate or support research and development activities for both public and government, versus government-unique, purposes.⁴

In 1993, Congress enacted Section 845 of the National Defense Authorization Act for Fiscal Year 1994⁵ to provide DARPA additional authority for a 3-year period to use “other transactions” to carry out prototype projects directly relevant to weapons or weapon systems proposed to be acquired or developed by DOD; that is, for government-unique purposes. The legislation did not provide specific objectives to be achieved from using the authority, nor did it define what constituted a prototype project. Further, the legislation did not require participants to share in the costs of the project or require that the agreements be used when a standard contract, grant or cooperative agreement was not appropriate or feasible, two conditions required to use an assistance-type other transaction. Congress required DOD to report annually on its use of other transactions.

⁴ We discussed various issues regarding DOD's initial use of assistance-type other transactions in our report, *DOD Research: Acquiring Research by Nontraditional Means* (GAO/NSIAD-96-11, Mar. 29, 1996).

⁵ P. L. 103-160, Nov. 30, 1993.

In 1996, Congress extended Section 845 authority to the military services and other defense agencies. At that time, senior DOD officials indicated that extending the authority to the military services and defense agencies would, among other things, assist their efforts to attract firms that traditionally did not perform research for the government and reduce the time necessary to field new weapon systems. Congress has twice extended the authority's expiration date, most recently until September 30, 2001.

DOD has issued limited guidance to defense components on using Section 845 agreements. For example, DOD's initial guidance on Section 845 agreements consisted of a memorandum issued by the Under Secretary of Defense for Acquisition and Technology in December 1996.⁶ Although it encouraged defense components to take advantage of the flexibility provided by Section 845 authority, the memorandum did not provide specific objectives or criteria for using it, define what constituted a prototype project, or specifically require components to establish metrics to assess whether the expected benefits were actually achieved.

Guidance issued at the component level mirrored DOD's approach in providing only broad parameters. For example, the Air Force encouraged its acquisition community to use Section 845 authority in situations where a standard contract discouraged cutting-edge, high-technology commercial firms from participating in DOD-funded programs; the Navy guidance encouraged its use to facilitate innovation; and the Army's guidance stated that the authority could enhance its ability to acquire new technology in a better, faster, and cheaper manner. The components' guidance also offered various definitions of prototype projects. For example, Air Force and Army guidance note that a prototype can generally be described as an end product that reasonably evaluates the technical feasibility or operational utility of a concept or system. DARPA described prototypes as not only including systems, but also lesser projects involving subsystems, components, technology demonstrations, and other technology development efforts. The Navy's guidance does not address what constitutes a prototype project.

⁶ The position was recently redesignated as the Under Secretary of Defense for Acquisition, Technology, and Logistics.

Agreements Varied in Project Type and Dollar Value, but Support a Small Percentage of DOD Research Efforts

As of October 1998, DOD has awarded 97 agreements that vary in type and dollar value. Before fiscal year 1997, only DARPA was authorized to use Section 845 agreements, awarding 15 agreements during fiscal years 1994 through 1996 (see table 1). Over the next 2 years, the military services and the National Imagery and Mapping Agency⁷ awarded 61—or nearly two-thirds—of the agreements awarded by DOD through fiscal year 1998. The military services' initial use of Section 845 agreements was largely associated with the Commercial Operations and Support Savings Initiative, a DOD initiative intended to reduce maintenance costs of fielded weapon systems by using commercial products and processes. DOD made the use of Section 845 agreements a requirement for this initiative. In total, 30 of the 38 agreements awarded by the military services in fiscal year 1997 were made under this initiative.

Table 1: DOD's Use of Section 845 Agreements Through Fiscal Year 1998

Component	Number of agreements					Total
	Fiscal Year					
	1994	1995	1996	1997	1998	
Army				10	3	13
Air Force				8	5	13
Navy				20	11	31
National Imagery and Mapping Agency				3	1	4
DARPA	1	6	8	4	15	34
Total	1	6	8	45	35	95

Source: Our analysis.

⁷ The National Imagery and Mapping Agency provides imagery, imagery intelligence, and other information that support national security objectives.

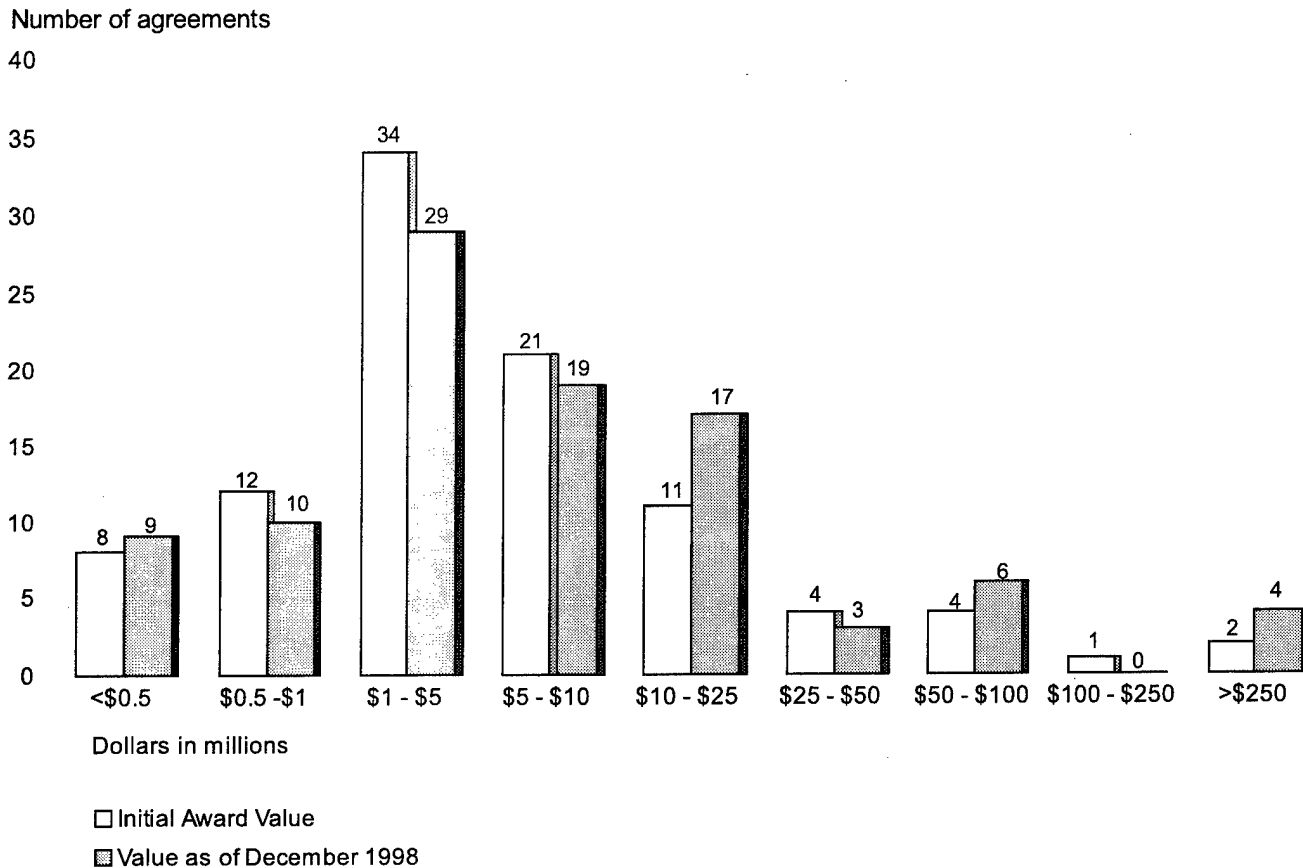
In early fiscal year 1999, the Air Force awarded two agreements under its Evolved Expendable Launch Vehicle program that represented a significant departure from previous agreements in terms of dollar value and financial commitment by the contractors.⁸ The Air Force committed \$500 million on each of these agreements and expects each of the two prime contractors to commit roughly \$1 billion. The contractors are to design and develop a family of launch vehicles capable of meeting both government and commercial requirements, and their cost-share is largely in recognition of the expected commercial demand for launch services.

Section 845 agreements support a wide range of projects. More than half of the projects involved either (1) studies to evaluate the feasibility or merits of future weapon system concepts or technologies or (2) the design and development of hardware-related subsystems and components. Section 845 agreements also support the development of software or software applications, information systems, and various imaging and detection technologies. A few projects will result in the development and manufacture of a major end item, such as the Navy's project to design and build a new oceanographic research ship. In this case, the Navy determined that because the ship incorporated numerous new technologies, including new hull and propeller designs, it could be considered a prototype for future efforts.

The agreements' dollar values have also varied greatly, as shown in figure 1.

⁸ DOD officials indicated that DOD awarded a total of 46 new Section 845 agreements in fiscal year 1999. We included the two Evolved Expendable Launch Vehicle agreements within the scope of our assignment due to their significance, but we did not obtain or analyze other agreements awarded in fiscal year 1999.

Figure 1: Distribution of Section 845 Agreements by Total Agreement Dollar Value



Source: Our analysis of Section 845 agreements awarded through October 1998.

At the time of award, the 97 agreements had a median value of about \$4 million, with individual awards ranging from a \$170,000 Navy effort (to test the feasibility of using composite materials for the motor cases of projectiles used in its 5-inch fire support gun) to the two \$500 million Air Force Evolved Expendable Launch Vehicle agreements.

DOD's initial financial commitment totaled about \$1.8 billion; however, due to changes in the value of 29 agreements, DOD's financial commitment experienced a net increase of about \$0.8 billion to about \$2.6 billion as of December 1998. Changes in the agreements' value resulted from (1) decisions to add work to the original agreement, (2) technical or

schedule problems that increased the effort's cost, or (3) termination of the planned activity. As shown in table 2, the four largest agreements cumulatively account for about 66 percent of DOD's commitment as of December 1998, while another six agreements account for an additional 16 percent. Of the 10 largest agreements, 9 involved traditional defense contractors, while the 10th involved a consortium comprised of both traditional defense contractors and commercial firms.

Table 2: Ten Largest Section 845 Agreements Measured by DOD Financial Commitment as of December 1998

Dollars in millions

Fiscal year awarded	Prime contractor	Project	DOD financial commitment		
			Amount	Percent	Cumulative percent
1999	Traditional	Develop national space launch capability under Evolved Expendable Launch Vehicle program	\$500.0	19.2	19.2
1999	Traditional	Develop national space launch capability under Evolved Expendable Launch Vehicle program	500.0	19.2	38.4
1995	Traditional	Design, develop, and flight test Global Hawk unmanned aerial vehicle	425.5	16.3	54.8
1994	Traditional	Design, develop, and flight test DarkStar unmanned aerial vehicle	283.1	10.9	65.7
1997	Traditional/ Commercial ^a	Evaluate use of commercial information processing, storage, transmission, compression, and display technologies for national security purposes	75.0 ^b	2.9	68.6
1997	Traditional	Evaluate use of commercial information processing, storage, transmission, compression, and display technologies for national security purposes	75.0 ^b	2.9	71.4
1998	Traditional	Develop a common cockpit for the CH-60 and SH-60R helicopters	74.5	2.9	74.3
1998	Traditional	Prepare concept studies for DD-21 Land Attack Destroyer	70.0	2.7	77.0
1996	Traditional	Develop a common ground communication system for Global Hawk and DarkStar unmanned aerial vehicles programs	62.7	2.4	79.4
1997	Traditional ^a	Develop logistics system	58.2	2.2	81.7
Total			\$2,124.1	81.7	

Note: Totals may not add due to rounding.

^aAgreements awarded to consortia.

^bAgreements are reported at their not-to-exceed value.

Source: Our analysis.

DOD's total financial commitment under Section 845 agreements represents a relatively small percentage of its overall research and

development spending. For example, while DOD awarded \$2.6 billion under Section 845 agreements over the 5-year period that we evaluated, it awarded about \$100 billion under research and development contracts over approximately the same period. DOD's financial commitment was augmented on more than half of the agreements by contractors' cost-sharing. In 48 agreements, contractors were committed to provide about \$178 million, in addition to the roughly \$2 billion the two prime contractors on the Evolved Expendable Launch Vehicle program are expected to provide. DOD officials also indicated that on other agreements contractors had contributed or were expected to contribute additional resources although they were not required to do so under the terms of the agreement.

DOD Reported Numerous Benefits, but Data Show Mixed Results in Attracting Commercial Firms

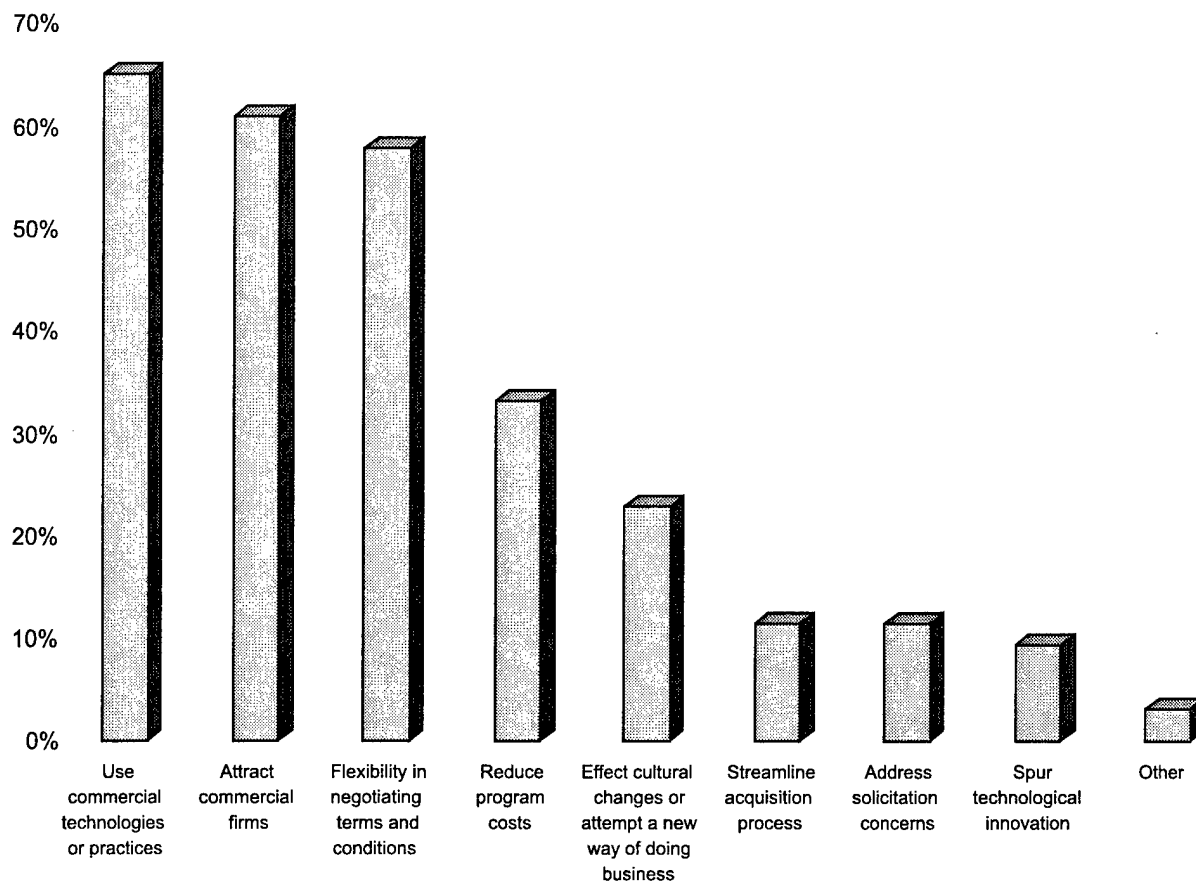
In a recent report to Congress, DOD attributed numerous benefits to Section 845 agreements; however, the report provided only limited data to assess the usefulness of these agreements. Our analysis of data recently developed by the DOD Inspector General suggest mixed results in attracting commercial firms, one of the main benefits DOD expected from using Section 845 agreements. Other reported benefits include reducing program costs or overcoming various solicitation issues.

DOD Report Provides Limited Data to Assess Agreements' Usefulness

In February 1999, DOD reported to Congress that Section 845 agreements provided numerous benefits, though DOD generally offered no quantified measures of the reported benefits or the extent that such benefits were derived from individual agreements. Our analysis of the information provided by the report on individual agreements found that, in most cases, DOD components cited more than one reason or expected benefit from using a Section 845 agreement. The top three reasons cited by DOD components were use of commercial products or processes, attracting commercial firms, and increased flexibility in negotiating terms and conditions (see fig. 2). To a lesser degree, DOD components cited such additional benefits as reducing program cost, attempting to effect cultural change by making the relationship between the government and contractor more like a partnership, trying new ways of doing business, streamlining the acquisition process, spurring technological innovation, or resolving various solicitation issues. These expected benefits were often interrelated. For example, flexibility in negotiating terms and conditions—particularly intellectual property and financial management clauses—was viewed as the key determinant in attracting commercial firms on several agreements. In turn, DOD personnel viewed attracting these firms as a means to leverage commercial technologies or practices.

Figure 2: Reasons Cited by DOD Components for Using Section 845 Agreements

Percent of 97 agreements



Note: DOD components often cited more than one reason for using a Section 845 agreement.

Source: Our analysis of DOD's February 1999 report to Congress on Section 845 agreements.

Evidence on Attracting Commercial Firms Indicates Mixed Results

Our work, as well as work recently conducted by the DOD Inspector General, found that Section 845 agreements have achieved mixed results in attracting commercial firms at either the prime or subcontract level.

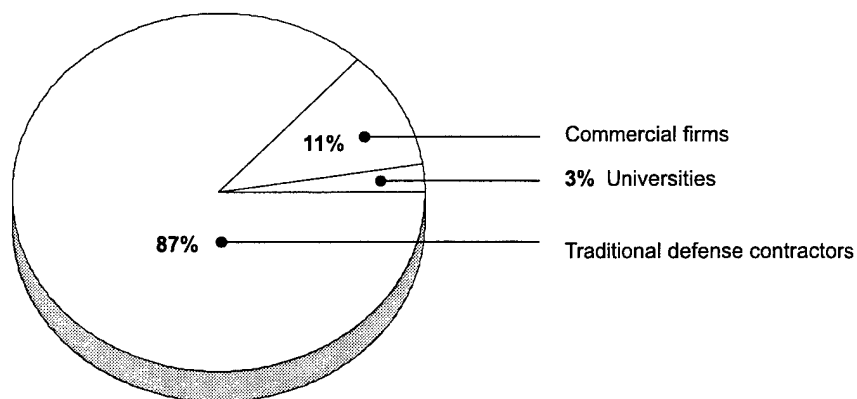
DOD officials told us they have been attempting to determine the extent that commercial firms were participating on Section 845 agreements since October 1997. At that time, DOD established a requirement for agreement officers to provide a report, which was to identify (among other things)

whether the prime contractor or consortium members had performed any prior research efforts for DOD. DOD officials told us that the data collection effort was not entirely successful, in part, because the definition that was provided to agreement officers of what constituted a commercial firm was too narrow, and the report did not provide information at the subcontractor level.

At about the same time that DOD established its reporting requirement, the DOD Inspector General began collecting information on aspects of other transactions, including information on the participants. In December 1999, the DOD Inspector General issued a report that included information on the participation of commercial firms on Section 845 agreements.⁹ For the purposes of their analysis, the Inspector General defined a commercial firm as one that had not performed research on cost-based contracts or that had been subject to an audit by the Defense Contract Audit Agency within the past 3 years. The Inspector General noted that while 34 Section 845 agreements—or more than one-third—had at least one commercial firm participating at either the prime or subcontract level, most of the participants were traditional defense contractors.

Our analysis of the Inspector General's data found that, at the prime contractor level, 84 of the 97 agreements were awarded to traditional defense contractors. Including participants that were members of consortium, we estimate that about 87 percent of the participants at the prime contractor level were traditional defense firms (see fig. 3). DOD officials told us the large number of traditional defense contractors at the prime contract level reflects the fact that Section 845 agreements are to be used on weapon or weapon systems-related projects. Nevertheless, DOD officials had hoped that the use of Section 845 agreements would attract more commercial firms.

⁹ *Costs Charged to Other Transactions*, Office of the Inspector General, Department of Defense, Report No. D-2000-065 (Dec. 27, 1999). The audit's objective was to review the financial and cost aspects of five assistance-type agreements, two Section 845 agreements, and selected subcontracts. During the audit, the Inspector General also quantified the number of contractors participating on assistance-type other transactions and Section 845 agreements awarded through October 1998.

Figure 3: Composition of Prime Contractors Awarded Section 845 Agreements

Note: Percentages do not total to 100 percent due to rounding.

Source: Our analysis of DOD Inspector General data on prime contractors awarded Section 845 agreements. The Inspector General defined commercial firms as those that had not performed research under a cost-based contract for DOD or had been subject to an audit by the Defense Contract Audit Agency in the last 3 years.

We found DOD personnel attributed the participation of commercial firms to the ability to tailor the agreement's terms and conditions, particularly the intellectual property and financial management clauses. Examples of such tailoring include the following:

- In January 1997, the National Imagery and Mapping Agency solicited proposals to develop and exploit commercial information technologies for national security purposes. The solicitation indicated that the agency intended to award a standard contract. According to agency officials, contractor representatives suggested that using a Section 845 agreement would help their consortium attract commercial firms. The resulting Section 845 agreement, which has a potential value of \$75 million, enabled participating contractors to use their standard accounting system, limited the government's audit rights to a review by a certified public accounting firm, and provided more flexible intellectual property rights. Contractor officials indicated that while about half of the work is being performed by divisions that routinely accept defense work, the other half is being performed by divisions that for various reasons would not have participated under a standard contract.
- A small commercial firm submitted an unsolicited proposal to DARPA to develop and demonstrate an unmanned aerial vehicle capable of vertical take-off and landing based on the company's existing proprietary technology. The company, however, was unwilling to work under a

standard contract, citing, among other factors, its concerns about accounting, auditing, and intellectual property requirements. The resulting \$16.7 million agreement allowed the company to use its commercial accounting practices, limited the government's review of its financial records, and limited the government's rights to intellectual property and technical data.

At the subcontractor level, DOD agreement officers reported that traditional defense contractors attracted commercial firms in 24 of the 84 agreements they were awarded. For the remaining agreements awarded to traditional defense firms, DOD agreement officers reported that either the prime contractor did not attract commercial firms at the subcontract level (20 agreements) or they did not know whether the prime contractors had attempted to do so (34 agreements). Agreement officers did not provide information on six agreements. In some cases, DOD and contractor personnel noted that because their projects were in the initial concept or design phase, the number of subcontractors actively involved was small. Once their projects matured and the need for subcontractors increased, they believed the use of Section 845 agreements might assist them in attracting commercial subcontractors.

Examples of Other Reasons Cited for Selecting a Section 845 Agreement

While attracting commercial firms was among the principal reasons defense components cited for using Section 845 agreements in DOD's February 1999 report, they also credited the use of Section 845 agreements with other benefits. The use of these agreements to reduce program costs or address solicitation issues illustrates some of the reasons offered by DOD components for using a Section 845 agreement.

In 32 agreements, or about a third, DOD components cited the use of a Section 845 agreement as a means of reducing a program's or technology's estimated cost, though few provided any estimates of specific dollar savings. Rather, DOD components noted that agreements reduced negotiating, administrative, or overhead costs typically associated with a standard contract or provided contractors the flexibility to make performance trade-offs needed to achieve a specific price goal. In other cases, DOD officials also noted that the cost of their specific program was reduced due to the cost-sharing provided by the recipients. For example, they noted that Section 845 agreements allowed recipients to apply independent research and development funds to their specific program.¹⁰

Another means of reducing program costs involved using Section 845 agreements to resolve funding shortfalls. For example, the Navy used a Section 845 agreement on its effort to develop a common cockpit for two helicopters. The Navy wanted to develop the cockpit in a 2-year time frame, but it could not do so because it did not have sufficient funds to pay for tasks that needed to be completed in the first year. Under the agreement, the contractor provided \$11.1 million of the \$29.2 million needed in fiscal year 1998, and the Navy provided the remaining \$18.1 million. While the contractor anticipated being reimbursed the \$11.1 million the following year, the agreement stated that the government's obligation for performance of the agreement beyond the \$18.1 million was contingent upon the availability of appropriated funds. Contractor officials told us they accepted the risk that they might not be reimbursed should the Navy decide to cancel the project because the effort was part of a high-priority Navy program and the Navy was one of their principal customers. By using a Section 845 agreement, Navy officials estimated they avoided over \$50 million in future costs.¹¹

¹⁰ Federal regulations provide that costs incurred by contractors in performing agreements such as Section 845 agreements may be treated as independent research and development expenses. If contractors elect to treat their contributions under Section 845 agreements as independent research and development expenses, the contractors may recover some portion of these costs as allowable overhead charges under other contracts they have with the government.

¹¹ The other option Navy officials considered viable to a Section 845 agreement was to issue a value-engineering change proposal. Under this approach, while the development costs remained the same, the contractor would receive half of the estimated \$105.8 million in cost savings attributed to the engineering change. A Navy official indicated they did not consider requesting that funds be reprogrammed from other sources—another option available to them—given the ability to use the Section 845 agreement.

DOD officials also used Section 845 agreements to resolve issues encountered during the contract solicitation phase. During this phase, the government defines its requirements, advertises them, and solicits and evaluates responses from interested parties. Failure to follow the required procedures can result in a protest from an unsuccessful offeror, thereby delaying the effort or resulting in a need to repeat the process. According to DOD officials, using a Section 845 agreement allowed them to address issues arising from the various competition and source selection requirements of the Competition in Contracting Act of 1984.¹² Examples of how DOD used agreements to address these issues follow:

- In one case, DARPA had solicited proposals to address DOD's future transportation and logistics planning needs. DARPA subsequently selected proposals from two different defense contractors for funding. After completing the selection process, the DARPA program manager believed the research would prove more valuable if the two contractors worked collaboratively; consequently, the two companies agreed to form a joint venture. In anticipation of awarding a contract, DARPA authorized the contractors to incur more than \$2 million in expenses. However, DARPA's General Counsel objected that the proposed contract would violate the established competition and source selection requirements, and in doing so, violate the Competition in Contracting Act. DARPA officials changed the standard contract to a Section 845 agreement—which is not subject to the act's requirements—to avoid repeating the competition and terminating the effort that was under way.
- In another effort, the Navy wanted to increase the number of contractors capable of producing a tactical data and voice communication terminal. Early in their planning efforts, Navy officials recognized that the likely bidders had different technical experience. Consequently, while they wanted to award multiple contracts of varying dollar values—with more funds being awarded to contractors with less experience—to increase competition, they could not devise appropriate solicitation and selection procedures that would have enabled them to do so while complying with standard solicitation requirements. Consequently, these officials used Section 845 authority to devise a solicitation and selection strategy that enabled them to award four agreements with values ranging from \$2.2 million to \$9.2 million.

¹² P. L. 98-369, July 18, 1984, as amended, generally codified in Chapter 137 of Title 10 of the United States Code.

Approaches Used to Address Issues Normally Governed by Standard Contract Provisions

DOD contracting personnel confront a different set of factors when structuring the terms and conditions of a Section 845 agreement than when using a standard contract. Whereas statutes or federal acquisition regulations generally prescribe a standard contract's terms and conditions in such areas as financial management or intellectual property, the clauses within a Section 845 agreement may be tailored to better address issues specific to a project. In his December 1996 memorandum, the Under Secretary of Defense for Acquisition and Technology acknowledged that DOD personnel would be operating in a relatively unstructured environment when negotiating Section 845 agreements and he set an expectation that the agreements incorporate good business sense and appropriate safeguards to protect the government's interest.

Our analysis of DOD's Section 845 agreements found that they generally addressed the areas typically governed by the standard contract provisions that we evaluated. In addressing financial management, termination and disputes processes, and subcontractor management issues, DOD personnel employed approaches that were generally less prescriptive or provided more generous terms than typically are provided to contractors in standard contract provisions. In these areas, the approaches employed varied little between agreements regardless of whether the recipients were commercial or traditional defense firms or whether the firms had provided a cost-share. In two other areas—intellectual property and government property—DOD personnel made more frequent use of the standard contract provision in agreements with traditional defense firms, while employing tailored clauses with commercial firms. The use of a model agreement contributed to this uniformity, but DOD officials often did not address why they selected either the standard contract provision or a tailored approach or discuss the anticipated benefits of their choice of approach in the analysis justifying the award of the agreement.

Agreements Adopted Similar Approaches in Most Areas

Section 845 agreements used approaches that varied little in most areas we evaluated. These areas included financial management, termination and dispute processes, intellectual property, government property administration, and subcontractor management (our scope and methodology are provided in more detail starting on page 33; app. I summarizes our analysis of the approaches taken under Section 845 agreements in addressing each of these areas). Regardless of the type of contractor, the agreement's value, or the recipient's contribution of financial resources, a typical Section 845 agreement

- relied on means other than certified cost and pricing data¹³ to establish a fair and reasonable price for the effort undertaken;
- allowed contractors to use generally accepted accounting principles rather than government cost accounting standards, which are viewed as more complex and costly to administer;
- limited the government's audit rights, generally by omitting (1) the requirement that the clause be included in subcontracts and (2) the requirement that provided GAO access to the prime contractor's and its subcontractors' books and records;¹⁴
- paid contractors a specified amount based on the accomplishment of agreed to technical milestones, rather than on the basis of incurred costs;
- did not provide DOD a right to terminate an effort for default by the contractor; and
- authorized the use of an alternative dispute resolution process that provided for a more streamlined and shortened process.

The terms and conditions of Section 845 agreements also provided considerable flexibility to the prime contractors in subcontractor management-related issues. For example, only two agreements required the contractor to notify the government of the intent to award subcontracts exceeding a certain dollar threshold. Further, while 5 agreements required the contractor to select subcontractors competitively, 15 agreements specifically waived the requirement.

DOD Used a Mix of Standard and Tailored Clauses to Address Intellectual Property Issues

DOD personnel used a mix of approaches in addressing intellectual property issues, which include patent rights to inventions and rights to data. Our analysis found that DOD personnel incorporated standard contract clauses more frequently to address intellectual property issues than in any other area we evaluated, with almost a third of the agreements, including at least one of the standard clauses. In cases in which the

¹³ With certain exceptions, the Truth-In-Negotiations Act (10 U.S.C. 2306a) requires contractors and subcontractors to submit cost or pricing data before the award of negotiated contracts exceeding \$500,000 and to certify that the data are accurate, complete, and current. If such data are later found defective, the government may seek to reduce the contract's price and, under certain conditions, seek civil or criminal penalties.

¹⁴ The National Defense Authorization Act for Fiscal Year 2000 included a provision that requires DOD to provide for GAO's access to agreements that provide payments of \$5 million or more. The act exempts agreements under certain circumstances and allows DOD to waive the requirement with prior notification to Congress and GAO.

standard contract clauses were not used, DOD officials tailored the clauses by extending the time frames the contractor was given to provide DOD patent or data rights, accepting more limited rights, or in certain cases, declining the rights altogether. Only one of the agreements awarded to commercial firms included standard intellectual property contract clauses.

Allocation of Rights to Inventions

The government's general policy regarding patent rights in inventions developed with federal assistance is to facilitate the commercialization and public availability of inventions by enabling contractors to obtain title to and profit from such inventions. To obtain these rights, a contractor must notify the funding agency of an invention, inform the agency that it intends to take title to the invention, file a patent application, and provide the government a royalty-free license.¹⁵ The government may acquire title to the invention if the contractor fails to follow these requirements.

Our analysis found that DOD personnel incorporated the applicable standard contract provision governing patent rights in 25 agreements. These agreements were generally awarded to traditional defense contractors. In the other 72 agreements, DOD incorporated language that varied widely. For example, DOD personnel often provided contractors 4 to 12 months to notify the government of an invention under Section 845 agreements, compared to 2 months provided in a standard contract. In some cases, the contractor was allowed to maintain inventions as trade secrets or the government declined patent rights altogether. Finally, some agreements clarified the definition of an invention to specifically exclude pre-existing inventions.

¹⁵ A royalty-free license allows the government to use the invention without compensating the owner of the patent.

Rights to Technical Data

DOD's policy is to acquire only the technical data and the rights to that data necessary to satisfy agency needs. Toward that end, contracting officers, among other things, are to specify the data DOD needs at the beginning of an effort and to negotiate rights to that data commensurate with the government's needs. In general, the government obtains unlimited rights when technical data were developed or created exclusively with government funds, government purpose rights when the data were created with mixed funding, and limited rights when the data were created exclusively at private expense.¹⁶

DOD employed a mix of approaches with regard to obtaining data rights under Section 845 agreements. For example, while most agreements used tailored clauses, DOD personnel cited standard contract clauses in 19 agreements. Similar to what we found in patent rights, these agreements almost always involved traditional defense firms. These agreements were generally low dollar efforts without cost sharing. Tailoring could involve DOD declining any rights to data or accepting government purpose rights for 10 years.

Our review of the agreement officers' analyses¹⁷ indicates that they generally believed acquiring the standard rights to such data would either hinder efforts to attract a commercial firm or was unnecessary for the current phase of the effort. The following examples illustrate the use of the agreements to provide more flexible data rights:

- DARPA agreed to not accept any technical data in the effort to develop the unmanned aerial vehicle capable of vertical take-off and landing.

¹⁶ These rights differ in the degree to which DOD may provide or authorize parties outside of the government to use the data. Unlimited rights provide the government the ability to use, modify, reproduce, perform, display, release, or disclose technical data in whole or in part, in any manner, and for any purpose whatsoever, and to have or authorize others to do so. Government purpose rights enable the government to allow others to use the data for government purposes, while limited rights generally require the government to obtain the contractor's written permission before doing so.

¹⁷ While requirements varied, defense components generally required agreement officers to document the rationale for using Section 845 agreements. For example, the Navy required its agreement officers, among other things, to discuss the rationale for using a Section 845 agreement in terms of its expected benefits and establish that the use of the authority was legally appropriate as part of the initial planning process. They were to prepare a subsequent analysis that discussed the level of competition achieved, the agreement's cost or price, the payable milestones used, data and patent rights, and issues relevant to the particular project, such as government furnished property.

The agreement provided DARPA options to subsequently acquire government purpose rights to the data at a cost ranging from \$20 million to \$45 million or by purchasing 300 vehicles. According to the agreement, the rights would be sufficient to establish a second source for competition.

- The Navy agreed that it would not take any rights to data produced during the competitive concept development phases of the DD-21 Land Attack Destroyer program. For these phases, the Navy has awarded a single Section 845 agreement, under which two teams will initially develop their systems' concepts and subsequently develop detailed designs. Further, the Navy indicated it would acquire only the technical data from the contractor team that was selected to design, construct, and support the vessel. Navy officials indicated they saw little value in obtaining technical data for a design they did not select and believed the teams and their suppliers would be more willing to utilize proprietary technology under the Navy's approach.

Mix of Standard and Tailored Clauses Also Found in Agreements Involving Government Property

We identified 60 agreements involving government property, which includes property provided by the government for use by the contractor and property acquired with government funds during the course of an effort. In 11 agreements—all with traditional defense contractors—the contractors were required to comply with the standard property management requirements specified by federal acquisition regulations. In 46 agreements, DOD personnel provided contractors discretion on the type of approaches they could use to manage government property or permitted contractors to retain title to property that had been acquired with government funds. For example, several agreements allowed traditional defense contractors the authority to maintain property in accordance with sound industrial practices. In other cases, the contractor was allowed to retain title to property acquired with government funds that had an acquisition value of up to \$50,000. DOD personnel had to approve the purchase of property greater than \$50,000, and the agreement included procedures for determining how such property was to be used or disposed of once the agreement was completed. We also found, however, that in three efforts involving government property, the agreement was silent on how such property was to be accounted for or managed.

Use of Model Agreement Contributed to Uniformity in Approaches

Our review found that the basis for many of the agreements was a model developed by DARPA, which contributed to the uniformity observed in the approaches taken under Section 845 agreements. DARPA officials noted that this model was developed for use on their assistance-type other transactions that generally involved dual-use technologies being developed by commercial firms under a cost-shared arrangement. Consequently, DARPA officials structured the terms and conditions to reflect the nature of these agreements. For example, the use of payable milestones, the more limited government audit rights, and the flexibility to use generally accepted accounting principles were designed, in part, to allow commercial firms to use their standard accounting systems and allay their concerns over government auditors reviewing their commercial finances. Similarly, the more generous intellectual property provisions were intended to provide time for the companies to commercialize the technology. Providing the contractor an ability to terminate an effort was premised on the belief that contractors would be making significant financial contributions to the effort. Finally, the model agreement did not initially include a property provision, since it was not believed these types of efforts would involve government property.

The initial reliance on model agreements by the services for many of their agreements, while reasonable during this period, may have led to agreements that were not tailored to address all relevant issues and may have resulted in terms and conditions that are not appropriate for prototype projects where costs were not shared between DOD and the contractor. For example, our review of the agreement officers' analyses found that the analyses often discussed only how the terms differed from the model agreement, rather than discussing the need for or expected benefits of employing a particular approach. Similarly, we found that in 26 agreements in which DOD provided all of the funding, the agreements provided the contractors the right to terminate, which DOD officials indicate would generally not be appropriate.

Approach Taken Under Evolved Expendable Launch Vehicle Agreements Generally Found Adequate Except for Financial Management

At the request of Congress, the DOD Inspector General evaluated whether the use of Section 845 authority was appropriate for the Evolved Expendable Launch Vehicle program and whether the agreements included adequate safeguards to monitor program performance and protect the government's interests. Air Force officials indicated that they had used the authority because neither of the two contractors would sign a standard contract under which they were to contribute up to \$1 billion in cost sharing. According to the Air Force, the contractors stated that in doing so

they would have had to treat their investment as a loss against their earnings, which was unacceptable. Further, the contractors believed that given their investment, requiring that they adhere to government cost accounting standards would require them to make their commercial books and corporate investment available to government auditors and would require that their subcontractors comply with these and other financial management requirements. Further, the contractors expressed concern for the need to protect their proprietary data to maintain their competitive positions in the commercial space launch market. Consequently, the agreements enabled the companies to use generally accepted accounting principles and limited the government's access to financial records.

The Inspector General concluded that the use of Section 845 agreements was appropriate for the efforts as the agreements provided the best contracting instrument to allow DOD to develop a dual-use launch capability. Further, the Inspector General concluded that the agreements' terms and conditions provided sufficient technical insights and other safeguards to protect the government's interest. The Inspector General noted, for instance, that the agreements' terms and conditions incorporated

- payable milestones that tied payment of government funding to the completion of key program accomplishments and prohibited the contractors from receiving government funding if they were unable to demonstrate technical progress;
- provisions that would require the contractors to refund government payments, plus interest, that they received should DOD terminate for default or if a contractor terminates the agreement for convenience; and
- an alternative disputes resolution clause that was intended to resolve disputes in a timely, fair, and cost-effective manner.

However, the Inspector General faulted the Air Force for negotiating terms and conditions that provided it with only limited insight into the contractors' financial progress, which could hinder DOD's efforts to monitor program costs and reveal or provide insight into problems. The Inspector General noted that the Air Force included a clause providing the agreements officer, or a designee, direct access to sufficient records and information to ensure accountability for government funding, but only senior-level Air Force officials could request an executive-level briefing on the contractors' total investment. According to the Inspector General, Air Force officials had not performed any reviews or requested any briefings about total program costs as of September 1999. Air Force officials indicated that such insight was not needed, in part, due to the use of payable milestones, Air Force personnel's participation in program reviews and their access to the contractors' information systems, and a firm price for the agreements. Air Force officials indicated that they have since met with contractor officials to discuss their total investment on the program.¹⁸

Additional Guidance Being Developed

DOD initially provided limited guidance on the use of Section 845 agreements, in part because it did not want to unduly restrict their use. Over the past year, however, DOD began efforts to provide additional guidance to facilitate their use. In December 1998, DOD provided discretionary guidance on its Internet-based Defense Acquisition Deskbook.¹⁹ In turn, this discretionary guidance formed the basis for a document released for comment to industry groups and defense components in September 1999 by the Under Secretary of Defense for Acquisition, Technology, and Logistics. According to a DOD official, the Under Secretary wanted to obtain their comments and recommendations prior to issuing more formal guidance.

As proposed, the guidance would provide factors for DOD personnel to consider when deciding whether to use a Section 845 agreement and in

¹⁸ In late 1999, DOD released the findings of an independent review team that had been tasked to assess the causes of five launch failures that occurred between August 1998 and May 1999. The report included recommendations to the Air Force that may affect the structure and cost of the Evolved Expendable Launch Vehicle agreements. According to DOD officials, the Air Force is currently developing strategies to implement these recommendations.

¹⁹ The Deskbook is intended to provide DOD personnel an automated reference tool on acquisition policy and practices.

structuring key provisions. It would also provide senior acquisition executives better insight on selected terms and conditions for agreements used on high-dollar efforts. Further, the guidance would also require DOD personnel to establish metrics to measure whether the expected benefits from Section 845 agreements were actually achieved. A DOD official noted that the proposed guidance is being revised in response to the extensive comments they received, but anticipates that it will provide revised guidance in April 2000.

Factors Provided in Determining Whether to Use a Section 845 Agreement

The guidance provides various factors to consider to assist DOD personnel in determining whether to use a Section 845 agreement. These factors include whether using a Section 845 agreement would attract firms that normally would not do business with the government or that would not accept a specific requirement (such as cost accounting standards or intellectual property requirements) normally required by federal acquisition regulations. The guidance also provides factors that tend to be more general in nature, such as whether the use of the agreement would enable DOD to acquire more affordable technology, reduce program costs, improve performance, or increase competition.

Assistance Provided in Structuring Agreements

The proposed guidance provides various factors for DOD personnel to consider when structuring a Section 845 agreement. This guidance focuses on the most common approaches or clauses found in the 97 agreements we reviewed. For example, to appropriately structure agreements, the guidance advises that

- contractors should not be provided a right to terminate the agreement unless they were making considerable financial contributions. In 26 agreements, the agreements provided contractors this right although they were not providing cost sharing.
- while DOD is not required to take title to property, agreements should contain a list of any property that the government does intend to take title and should discuss the procedures governing the accountability, control, and disposition of the property. We found that three agreements did not include a property clause although government property was provided or acquired.
- agreements should contain an audit clause that provides agreement officers or their representatives direct access to sufficient records and information to ensure accountability for the government's funds. We found that five agreements did not contain any audit clause, while the

DOD Inspector General has expressed concern that the audit clauses that had been included in Section 845 agreements it reviewed did not clearly indicate whether DOD had access to contractor records to verify whether the terms and conditions of the agreement were satisfied. In particular, the Inspector General noted in its December 1999 report that agreements that involved large amount of funds, were cost-based, or involved contractors with poor past performance or inadequate business practices, required a more detailed audit clause.

The guidance further indicates that agreement officers may use the standard contract clauses to address intellectual property and government property provisions. The guidance omits reference to using standard clauses in other areas, though it does not prohibit their use, and it is silent with regard to subcontractor-related provisions.

Additional Analyses Expected for Agreements Involving Major Weapon Systems

DOD's December 1996 guidance required DOD components intending to use agreements on projects that were to lead to major weapon systems to address how DOD's policies and procedures governing these systems were to be subsequently applied.²⁰ The proposed guidance would also require that analyses on the agreements' key terms and conditions be provided to senior DOD officials for Section 845 agreements used on efforts that have transitioned to or were initiated as major weapon systems prototype projects. DOD officials indicated that because most major acquisition programs use standard contracts, only the terms and conditions unique to the program are discussed. For major acquisition programs using Section 845 agreements, the proposed guidance would require a summary of the government's position on the provisions governing termination, payment method, audit requirements, technical data, patent rights, and government property, including the significance of the differences between the agreement term and the standard contract provision, and the rationale and benefit to the government of the agreement's term.

²⁰ DOD's principal regulations governing acquisition programs are embodied in DOD Directive 5000.1 and DOD Regulation 5000.2-R. DOD defines a major defense acquisition program as one that is either so designated by the Under Secretary of Defense for Acquisition, Technology, and Logistics, or one that is expected to require an eventual expenditure for research, development, test, and evaluation of more than \$355 million or for procurement of more than \$2.135 billion (as measured in constant fiscal year 1996 dollars). These regulations require program managers to develop an acquisition strategy, which is to include a discussion of the type of contracts contemplated for each phase.

Requirement to Establish Metrics May Not Result in Developing Meaningful Indicators of Expected Benefits

The proposed guidance would also require DOD personnel to establish metrics prior to the agreement's award to be used to measure the extent to which expected benefits were actually achieved. This requirement, however, may not result in meaningful indicators of the expected benefits. To be meaningful indicators, metrics should reflect only those benefits directly related to using a Section 845 agreement and for which quantifiable measures can be developed.

DOD is currently evaluating how to measure whether the agreements enabled DOD to attract commercial firms, which would, in our opinion, provide a reasonable indicator as to whether Section 845 agreements were achieving one of the cited benefits from their use. However, to be an accurate indicator requires that DOD establish a common definition of what constitutes a commercial firm, which it has not yet done. For example, representatives from the Office of the Secretary of Defense believed that the Inspector General's definition of a commercial firm—firms that had not accepted a cost-type research contract or had not been subject to an audit by the Defense Contract Audit Agency within the last 3 years—could result in counting as traditional defense contractors those firms that performed only a very small percentage of work for DOD or those that had both commercial and government divisions at the same location.²¹ DOD is also discussing the need for and means to collect information on the participation of commercial firms below the prime contractor level.

Further, the guidance does not provide guidelines for developing metrics that would serve as meaningful indicators. Our work indicates that establishing this requirement without providing guidelines may not result in the desired information. While recognizing that agreement officers were not specifically required to establish metrics, we surveyed them to determine whether they had done so on their own initiative. In 60 of 97 agreements, they had not done so, while another 3 did not respond to our inquiries. In the remaining 34 cases, DOD officials reported that they had established metrics. However, our review of the metrics found that

²¹ Determining which business unit performs the work seems critical to understanding whether the agreement attracts commercial firms. For example, a DOD component had cited attracting a cutting-edge, primarily commercial firm as a benefit in DOD's report to Congress. Contractor officials told us that they had anticipated using their commercial divisions, but after being unable to agree on a labor rate that was acceptable to the firm's commercial divisions and DOD, they decided to perform the research in their government division.

most were related to a program's performance, schedule, or cost goals. For example, one of the cited metrics was whether the contractor was able to reduce the cost of a particular material from \$60 per pound to between \$35 to \$40 per pound. It was unclear whether achieving these objectives could be directly attributed to the use of the Section 845 agreement.

DOD and contractor personnel provided various opinions about whether metrics could be established to reasonably measure various types of benefits. For example, one Air Force agreement officer noted that the use of a Section 845 agreement reduced his program's cost by reducing the negotiation and approval times typically encountered and that use of more flexible data rights encouraged technical innovation on the part of the contractor. While he had not established metrics, he believed that he could have measured (1) negotiation times compared to that required for a standard contract and (2) indirect cost savings directly attributable to the agreement's reduced administrative requirements. On another project, officials at one defense contractor noted that while the time spent on administering agreements is considerably less than the time spent administering a standard contract, their management information system does not track administration time by instrument type.

Similarly, measuring benefits such as cultural change, new ways of doing business, or technological innovation—some of the broad objectives cited by DOD components—may prove difficult. For example, DARPA officials noted that Section 845 agreements, when used in conjunction with other acquisition reform initiatives, represent attempts to encourage contractors to look at problems in new ways. As such, DARPA officials viewed these techniques as a set of interrelated means to achieve an overall program objective. They acknowledged that measuring the extent to which these objectives were achieved, or specifically attributing their achievement to the use of a Section 845 agreement, would be difficult.

Comments Reflected Desire to Maintain Flexibility, but Also Suggested Need for Further Clarification

DOD received comments from both defense components and industry groups²² on the proposed guidance. The comments reflected a desire to maintain the flexibility afforded by using Section 845 agreements, but also reflected a need to provide a better framework for identifying opportunities to use the agreements and for tailoring their terms and conditions to specific objectives. DOD officials told us that they hope to issue revised guidance by April 2000.

Industry representatives noted that their members found that agreement officers were reluctant to use Section 845 agreements on projects that did not appear to be "de facto" weapon systems; consequently, they believed that providing a broad definition of what constituted a prototype project would be useful. Further, these groups emphasized the value of Section 845 agreements in attracting commercial firms; consequently, they believed that additional guidance on tailoring intellectual property provisions and clarifying financial management requirements may be useful for agreement officers who were unfamiliar with commercial practices or who may be reluctant to vary from the model agreements.

Defense components generally concurred with the need for guidance, but did not agree on its role and content. The Inspector General, for example, suggested that the guidance define what constituted a prototype project or a commercial firm and clarify various administrative and financial management issues (such as the role of the Defense Contract Audit Agency and an appropriate access to records clause). Additionally, the Inspector General and DARPA officials believed examples of metrics should be included. On the other hand, Navy officials noted that the strength of the instrument was that there was little or no prescribed format or form and that there was still much to be learned from experimenting with the authority. Consequently, the Navy believed that while the guidance was useful in an advisory role, making it mandatory may diminish or negate the benefits derived from using Section 845 agreements.

Conclusions

Having gained experience in using Section 845 agreements, a new tool that embodies alternative approaches to standard contracts, DOD is taking the

²² DOD requested comments from the Council of Defense and Space Industry Associations (which is composed of 8 associations representing over 4,000 firms) and the Integrated Dual-Use Commercial Companies (a consortium of 8 predominately commercial firms).

necessary step of developing additional guidance to enable its personnel to both take advantage of the flexibility afforded by the agreements and protect the government's interests. DOD's challenge is to reconcile conflicting perspectives to maximize the benefits of using Section 845 agreements. Expediting this effort will help DOD personnel to identify opportunities to use and to better structure Section 845 agreements before the authority expires on September 30, 2001.

With experience that DOD has gained from the use of Section 845 agreements to date, there is a need to conduct a more rigorous analysis of the benefits from using Section 845 agreements. Existing information offers little in the way of useful indicators. Relevant indicators should be readily measurable and directly attributable to the agreement's use. Some of DOD's cited benefits, such as effecting cultural change, may not meet this test; others, such as attracting commercial firms providing cutting-edge technologies, would. Establishing a targeted set of valid metrics for which reliable data can be readily collected may impose less of a burden on DOD and contractor personnel than DOD's current approach, as well as provide useful information to DOD in its oversight responsibilities and Congress as it considers the authority's future.

Recommendations

To assist DOD personnel in determining whether to use a Section 845 agreement, we recommend that the Secretary of Defense provide updated guidance that lays out the conditions for using Section 845 agreements and provides a framework to tailor the terms and conditions appropriate for each agreement. Further, the Secretary of Defense should establish and require the use of a set of metrics, including the number of commercial firms participating in Section 845 agreements, which are measurable and directly related to the agreement's use. These requirements should be in place in time to assist in the deliberations on whether to extend the authority past September 30, 2001.

Agency Comments

In commenting on a draft of this report, DOD concurred with the need for revised guidance to help determine when Section 845 agreements should be used. DOD plans to issue an updated guide by April 2000. While the substance of the guide is still being discussed, DOD stated that the guidance will refine the conditions for using Section 845 authority and will provide a framework for tailoring the terms and conditions for each agreement.

DOD partially agreed with the recommendation to establish and require the use of a set of metrics. DOD noted that it will continue to track the participation of commercial firms on Section 845 agreements and participants' cost-share, and provide information on the agreements' impact on the technology and industrial base and new relationships and practices. As we note in the report, commercial firms participate in various levels of DOD projects. Consequently, it will be important that DOD continue to track the participation of such firms at both the prime and subcontractor levels.

DOD expressed some concern, however, about establishing additional metrics, citing the difficulty in doing so and the potential for relying too heavily on only what can be quantified. DOD noted that it will continue to explore whether there are additional metrics that could be established that are measurable and directly related to the agreements' use. However, DOD did not establish any time frames for identifying these additional metrics. Without timely identification of these metrics, there may not be sufficient information that directly links the use of a Section 845 agreement to improved program outcomes before the authority expires on September 30, 2001.

DOD's comments are reprinted in appendix II. DOD also provided technical suggestions, which we have incorporated in the text where appropriate.

Scope and Methodology

To assess DOD's use of Section 845 agreements, we determined

- the extent to which DOD has used Section 845 agreements,
- the benefits reported from their use,
- how DOD tailored these agreements to address issues normally governed by standard contract provisions, and
- DOD's efforts to provide additional guidance on their use.

To determine the extent to which DOD has used Section 845 agreements, we reviewed DOD's annual reports for fiscal years 1994 through 1998 on its use of other transactions, as well as its February 1999 report that focused specifically on Section 845 agreements. From these reports, we identified 95 agreements.²³ We also included the two Section 845 agreements the Air Force awarded in October 1998 for the Evolved Expendable Launch Vehicle program. While these agreements were awarded in early fiscal year 1999, we included them because (1) DOD's financial commitment under these two agreements was significant and (2) we had expressed concern about the Air Force's plan to use other transactions on the program in a June 1998 report.²⁴ The conference report accompanying the DOD Appropriations Act, 1999, required the DOD Inspector General to certify that the use of other transaction authority was appropriate and that adequate safeguards exist to protect the government's interest and monitor program performance. To minimize duplication of efforts, we relied on the Inspector General's work.

We obtained copies of the 95 agreements awarded between fiscal year 1994 and 1998, of the two Evolved Expendable Launch Vehicle agreements, of modifications that were awarded through December 1998, and of other pertinent data. Such data included the agreement officer's analyses, legal reviews, and other pertinent information.

To determine the benefits that were expected from using Section 845 agreements, we reviewed the legislative history concerning the creation and extension of the authority as well as testimony provided by senior DOD officials in 1996. We reviewed the annual reports submitted by DOD to Congress on its use of other transactions, concentrating our efforts on the report provided in February 1999 that focused specifically on Section 845 agreements. We reviewed the data provided on each agreement to determine the benefits that DOD components ascribed to using Section 845 agreements on that project. After reviewing the data, we judgmentally grouped the reported benefits into various categories. We discussed with selected agreement officers their views on the expected benefits or

²³ In its February 1999 report to Congress on Section 845 agreements, DOD reported it awarded 111 Section 845 agreements between fiscal year 1994 and 1998. DOD's number is higher because it reported 16 options or task orders awarded under existing agreements separately.

²⁴ *Evolved Expendable Launch Vehicle: DOD Guidance Needed to Protect Government's Interests* (GAO/NSIAD-98-151, June 11, 1998).

potential risks in using a Section 845 agreement. We also surveyed agreement officers to obtain their views on using Section 845 agreements, including whether they had established metrics.

To determine how the agreements addressed various issues normally governed by standard contract provisions, we used the matrix contained in Part 52.301 of the Federal Acquisition Regulation to determine the clauses that would typically be included in either a fixed-price or cost-reimbursable research and development contract. We eliminated those clauses that were required only during the solicitation phase, were alternate versions of other clauses, or were optional, resulting in a universe of 169 clauses. Our final analysis focused on 25 clauses we considered the principal ones governing such areas as financial management, termination and dispute processes, intellectual property, government property, and subcontractor management. For each clause, we reviewed the legislative or regulatory background and assessed whether the pertinent statute or regulation was applicable to Section 845 agreements. We analyzed each of the 97 agreements to determine whether the agreement included any of the 25 clauses or contained language that addressed the area governed by the clause. We compared the agreement's language with the standard contract clause to assess whether and how they differed.

There is no consensus within DOD on what constitutes a commercial firm. Consequently, we relied on the DOD Inspector General's classification of recipients as either a traditional defense contractor or a commercial firm for our analyses. The Inspector General defined a commercial firm as one that had not performed research on cost-based contracts or been subject to an audit by the Defense Contract Audit Agency within the past 3 years. We did not provide agreement officers a definition of a commercial firm when we asked whether traditional defense contractors attracted commercial firms at the subcontract level.

To determine DOD's efforts to provide guidance on the use of Section 845 agreements, we reviewed DOD and defense component guidance, including discretionary guidance issued by DOD in December 1998 on DOD's Acquisition Deskbook and the guidance proposed by DOD in September 1999.

We also reviewed agreement files and discussed various issues with cognizant officials at the following locations:

-
- U.S. Army Communications - Electronics Command, Fort Monmouth, New Jersey;
 - Defense Advanced Research Projects Agency, Arlington, Virginia;
 - National Imagery and Mapping Agency, Bethesda, Maryland;
 - U.S. Navy Naval Air Systems Command, Patuxent River, Maryland;
 - U.S. Navy Naval Sea Systems Command, Arlington, Virginia; and
 - U.S. Navy Space and Warfare Systems Command, San Diego, California.

To obtain the views on the benefits and risks of using Section 845 agreements from the contractors' perspective, we interviewed contractor officials at the following locations:

- Autometric, Incorporated, Springfield, Virginia;
- California Microwave, Incorporated, Belcamp, Maryland;
- Eastman Kodak Commercial and Government Systems, Rochester, New York;
- Lockheed Martin Federal Systems, Owego, New York;
- Raytheon Company, Falls Church, Virginia;
- Rochester Photonics Corporation, Rochester, New York;
- Signal Processing Systems, San Diego, California;
- ThermoTrex Corporation, San Diego, California;
- ViaSat, Incorporated, Carlsbad, California; and
- VisiCom, San Diego, California.

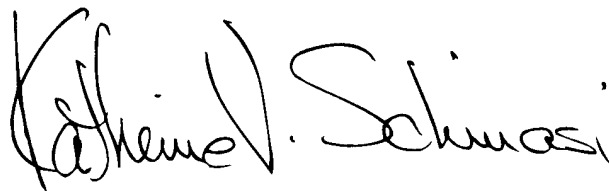
We also discussed the use of Section 845 agreements with representatives from the National Media Laboratory Strategic Alliance, a consortium of six contractors. We also discussed various issues with officials from the Office of the Director, Defense Procurement, Washington, D.C.

We performed our review from September 1998 through January 2000 in accordance with generally accepted government auditing standards.

We are sending copies of this report to the Honorable William S. Cohen, Secretary of Defense; the Honorable Louis Caldera, Secretary of the Army; the Honorable Richard Danzig, Secretary of the Navy; the Honorable F. Whitten Peters, Secretary of the Air Force; Dr. Fernando L. Fernandez, Director, Defense Advanced Research Projects Agency; Major General Timothy P. Malishenko, Commander, Defense Contract Management Command; Lieutenant General James C. King, Director, National Imagery and Mapping Agency; and the Honorable Jacob J. Lew, Director, Office of

Management and Budget. Copies will also be made available to other interested parties upon request.

Please contact me at (202) 512-4841 if you or your staff have any questions concerning this report. Additional points of contact and key contributors to this report are listed in appendix III.

A handwritten signature in black ink, reading "Katherine V. Schinasi". The signature is written in a cursive, flowing style.

Katherine V. Schinasi
Associate Director
Defense Acquisitions

Treatment of Selected Issues Under Section 845 Agreements

Depending on such factors as the contract type¹ and dollar value, a Department of Defense (DOD) contract could incorporate more than 100 Federal Acquisition Regulation and Defense Federal Acquisition Regulation Supplement clauses. These clauses implement statutory or regulatory requirements involving financial management, termination and dispute processes, intellectual property rights, government property administration, and subcontractor management, among others. These requirements are intended to protect the government's and suppliers' interests and to delineate each party's respective rights and responsibilities. DOD agreement officers indicated that in most cases a standard contract could have been used to execute efforts performed using a Section 845 agreement. However, as Section 845 agreements are generally not subject to the federal laws and regulations governing standard contracts, DOD contracting officials need not include the standard contract clauses that address these issues. We compared how the 97 Section 845 agreements entered into by DOD through October 1998 addressed these issues in comparison to the approaches required by standard contract clauses.

Financial Management

Contractors are subject to a variety of statutes and regulations governing pricing and negotiation under standard DOD contracts. Three requirements—cost accounting standards, the cost principles specified under the Federal Acquisition Regulation, and the requirements prescribed under the Truth-In-Negotiations Act—are among the government's primary means of attempting to assure itself that it acquires goods and services at a

¹ Contracts are grouped into two broad categories—fixed-price and cost-reimbursement—which differ according to the degree of responsibility assumed by the contractor for the costs of performance and the amount and nature of profit incentive offered to the contractor for achieving or exceeding specified standards or goals. Fixed-price contracts are typically used when the risk involved is minimal or can be predicted with an acceptable degree of certainty; conversely, cost-reimbursement contracts are used when the uncertainties involved in contract performance do not permit costs to be estimated with sufficient accuracy. Measured by dollar value, about 80 percent of DOD's research contracts are cost-reimbursement.

fair and reasonable price on a cost-based contract.² The government reserves the right to audit a contractor's books, records, accounting procedures, and other data to ensure compliance with these requirements, and to adjust a contract's price for noncompliance.

We found that the financial management provisions typically used in Section 845 agreements provided contractors more flexibility in their business processes and were less prescriptive than standard contract clauses. With regard to accounting principles, 66 of the 77 agreements that would have been subject to cost accounting standards if a standard contract had been used were instead allowed to comply with generally accepted accounting principles, which are accounting principles widely used in commercial practice (see table 3).

² There are 19 cost accounting standards that deal with (1) overall cost accounting matters; (2) classes, categories, and elements of cost; and (3) the treatment of indirect costs. The rules were intended to achieve, among other things, more uniform and consistent practices, reduce the likelihood of the government being mischarged, and increase the reliability of contractor cost data. Part 31 of the Federal Acquisition Regulation articulates the cost principles and procedures for pricing contracts and subcontracts and their modifications. With certain exceptions, such as for commercial items, the Truth-In-Negotiations Act requires contractors and subcontractors to submit cost or pricing data before the award of negotiated contracts exceeding \$500,000 and certify that the data are accurate, complete and current. If such data are later found to be defective, the government may seek to reduce the contract's price, and under certain conditions seek civil or criminal penalties.

Appendix I
Treatment of Selected Issues Under Section
845 Agreements

Table 3: Accounting Requirements

FAR clause	Intent	Number of agreements by approach				
		Cited FAR clause	Used tailored clause	Allowed use of GAAP ^a	Did not address	Would not apply
52.230-2: Cost accounting standards	Prescribes accounting requirements to protect government from the risk of overpaying on cost-based contracts. Requires contractors to disclose and consistently follow accounting practices, permits government access to documents to assure compliance, and enables the government to adjust contract prices for failure to comply with disclosed practices.	3	7	66	1	18 ^b

Note: Number of agreements may not total to 97 as information was not available to make a determination in all cases.

^aGAAP stands for generally accepted accounting principles.

^bCost accounting standards would not have applied even if a standard contract had been used due to various exemptions.

Source: Our analysis.

Similarly, 46 agreements in which agreement officers indicated that the contractor would have been required to submit certified cost or pricing data had they used a standard contract did not include the provisions requiring such data. As these data were not required, the agreements did not include clauses that would enable DOD to reduce the contract's price if the data proved defective (see table 4). DOD personnel reported that among the techniques they used to evaluate the contractor's proposed prices included

- comparing a contractor's proposed labor rates with industrywide averages obtained from commercial sources;
- comparing the contractor's proposed price with its published catalogue price and other sources, for similar services; and
- obtaining cost and pricing data from the contractor and then, with the assistance of Defense Contract Management Command, Defense Contract Audit Agency or military personnel, evaluated the proposed cost and technical effort.

Appendix I
Treatment of Selected Issues Under Section
845 Agreements

DOD personnel rarely used two other pricing-related clauses, which are intended to discourage contractors from including unallowable costs in DOD contracts or which provide the policy and procedures for disallowing such costs (see table 4).

Table 4: Pricing-Related Issues

FAR clause	Intent	Number of agreements by approach			
		Cited FAR clause	Used tailored clause	Did not address	Did not apply
52.215-10: Price reduction for defective cost or pricing data	Provisions implement the Truth-In-Negotiations Act (10 U.S.C. 2306a). The act requires that prime contractors and subcontractors submit cost or pricing data supporting their proposed price for negotiated contracts exceeding certain thresholds and certify that the data were accurate, complete, and current. The clauses enable the government to reduce a contract's price if the submitted data were defective.	0	0	46	51 ^a
52.215-12: Subcontractor cost or pricing data					
52.242-1: Notice of intent to disallow costs	Prescribes policy and procedures for disallowing costs.	1	1	76	18
52.242-3: Penalties for unallowable costs	Clause discourages contractors from including unallowable costs in indirect cost rate proposals by providing notice that contractors including such costs may be subject to penalties.	1	0	77	18

Note: Number of agreements may not total to 97 as information was not available to make a determination in all cases.

^aDOD agreement officers reported that the clauses would not have been applicable even if a standard contract had been used, usually because the effort's dollar value fell below the threshold or there was adequate price competition.

Source: Our analysis.

Almost all of the agreements—92 of 97—provided some form of audit capability, either by including the standard clause or employing a tailored clause (see table 5). Tailored clauses generally indicated that the recipient's records were to be made available to the agreement officer or a designee; however, the tailored clauses generally did not include a requirement that the clause be included in subcontracts or provide GAO access to either the prime contractor's or its subcontractors' books and records.³ Five agreements did not include a provision providing for audits.

Table 5: Audit Approaches

FAR clause	Intent	Number of agreements by approach		
		Cited FAR clause	Used tailored clause	Did not address
52.215-2: Audit and records—negotiation	Enables the government to exercise oversight on contracts. Requires contractors and subcontractors to maintain adequate records and to provide access to such records by the contracting officer and GAO.	4	88	5

Source: Our analysis.

DOD currently provides contract financing on research contracts by two general means. On cost-type contracts, DOD generally reimburses contractors for costs they have incurred. These costs must comply with federal cost principles. Under fixed-price contracts, contractors may receive progress payments, whereby they are partially reimbursed by DOD for the work they have performed. Both financing methods enable the government to audit the contractor's request for payment. In contrast, nearly all Section 845 agreements used some form of milestone payments, similar to a performance-based progress payment⁴ (see table 6). Under this method, the government and the contractor establish various milestones (usually based on achievement of a technical event) and negotiate a price.

³ The National Defense Authorization Act for Fiscal Year 2000 included a provision that requires DOD to provide for GAO's access to agreements that provide payments of \$5 million or more. The act exempts agreements under certain circumstances and allows DOD to waive the requirement with prior notification to Congress and GAO.

⁴ Performance-based payments are not currently authorized for research contracts. In February 1999, however, DOD proposed a change to the Federal Acquisition Regulation to make such payments available for use on fixed-price research contracts.

Appendix I
Treatment of Selected Issues Under Section
845 Agreements

Upon successful completion of the milestone, and review and approval by a designated DOD official, DOD generally pays the contractor the amount specified for the milestone.

Table 6: Financing Approaches

FAR clause	Intent	Number of agreements by approach		
		Cited FAR clause	Used tailored clause	Used milestone payments
52.232-16: Progress payments	Prescribes rules and procedures for invoicing and payment. Progress payment clauses are used on fixed-price contracts, while allowable cost and payment clauses are used on cost-reimbursement contracts.	6	5	86
52.216-7: Allowable cost and payment				

Source: Our analysis.

The Federal Acquisition Regulation also provides several financing-related clauses that are intended to protect the government against violations of the Antideficiency Act (31 U.S.C. §1341), which prohibits government officials from creating or authorizing an obligation in excess of funds available or in advance of appropriations. Agreements generally did not include language that notified the contractor that not all funds were available to execute the agreement, as would a standard contract; on the other hand, most agreements included language that limited the government's obligation to the amount of funds DOD had obligated on the contract (see table 7).

Appendix I
Treatment of Selected Issues Under Section
845 Agreements

Table 7: Financing-Related Issues

FAR clause	Intent	Number of agreements by approach			
		Cited FAR clause	Used tailored clause	Did not address	Did not apply
52.232-18: Availability of funds	Provides notice that the government's liability under the contract is contingent upon the availability of funds to be subsequently appropriated.	0	9	59	29 ^a
52.232-20: Limitation of cost	Requires contractor to notify the government when costs to be incurred through the next 60 days will exceed 75% of a contract's estimated costs. Clauses are used on cost-	6	72	0	18 ^b
52.232-22: Limitation of funds	reimbursement contracts, with specific clause depending on whether the contract is incrementally or fully funded.				

Note: Number of agreements may not total to 97 as information was not available to make a determination in all cases.

^aThe clause would not have applied on 29 agreements because all funds were available at the time of agreement award.

^bAgreement officers indicated that they would have used a fixed-price type contract in 18 agreements; consequently, neither of the limitation clauses would have been applicable.

Source: Our analysis.

Termination and Dispute Procedures

The Federal Acquisition Regulation provides the policies and procedures for terminating standard contracts and for resolving claims arising from those contracts. The regulation prescribes the use of clauses that provide DOD a right to terminate a contract, either for its own convenience or for default on the contractor's part; discusses the rights and responsibilities of each party; and prescribes various procedures for audits, property inventories, and disposition, among other contract close-out procedures.⁵ While the government's policy is to try to resolve disputes at the contracting officer's level, the regulation also provides that upon failure to reach a mutual agreement, the parties can seek further remedy as provided

⁵ Under a termination for convenience, the contractor is compensated for the work done, including a reasonable profit. In a default termination, the government determines that the contractor has, or will, fail to perform its contractual obligations. Consequently, the government is not liable for the contractor's costs on undelivered work and is entitled to repayment of funds provided for that work. However, DOD infrequently terminates research contracts. For example, DOD terminated only 24 research contracts in fiscal year 1998.

Appendix I
Treatment of Selected Issues Under Section
845 Agreements

under the Contract Disputes Act of 1978, as amended.⁶ This act provides the procedures and requirements for asserting and resolving claims arising under or related to a standard contract. For example, under the act, the contractor must submit claims in writing to the contracting officer within 6 years after the events precipitating the dispute were known or should have been known.

All 97 Section 845 agreements contained termination provisions (see table 8). Unlike a standard contract, however, 64 of the 97 agreements provided both DOD and the contractor the option of terminating an agreement, while 20 agreements provided DOD a right to terminate for convenience only. The agreements generally called for both sides to negotiate in good faith without detailing the specific procedures or steps.

Table 8: Termination Procedures

FAR clauses	Intent	Number of agreements by approach				Other ^a
		Cited FAR clause	Provided DOD right to terminate for convenience or default	Provided DOD right to terminate only for convenience	Provided both contractor and DOD right to terminate for convenience	
52.249-6: Termination (used on cost-reimbursement contracts)	Provide DOD the right to terminate a contract for convenience or default, and specify termination processes and procedures.	0	4	20	64	8
52.249-2: Termination for the convenience of the government (used on fixed-price contracts)						
52.249-9: Default (used on fixed-price contracts)						

^aOther includes agreements that provided some other combination of termination rights.

Source: Our analysis.

Nearly all agreements called for an alternative dispute resolution process to resolve claims, which could include disagreements over termination

⁶ 41 U.S.C. § 601-613.

expenses or other breach-of-contract issues (see table 9). This approach generally provided for more limited time frames for making a claim than under a standard contract and provided that the final decision authority resided with a senior official within the DOD component making the award. While agreements noted that the decision was not subject to further administrative review, each party could seek further legal remedy.

Table 9: Dispute Procedures

FAR clause	Intent	Number of agreements by approach		
		Cited FAR clause	Used tailored clause	Did not address
52.233-1: Disputes	Clause implements the Contracts Disputes Act, which establishes procedures and requirements for asserting and resolving contractor claims against the government.	1	96	0

Source: Our analysis.

Intellectual Property

Maximizing the value and usefulness of intellectual property (which includes patents and technical data) often requires a balancing of competing interests. For example, DOD may need to obtain or to have access to data produced or used during the performance of its contracts to carry out its mission and programs. However, contractors have expressed concerns that providing the government rights to certain data could decrease their competitive advantage and have cited intellectual property provisions as a reason for not accepting government research funding.

The government's general policy regarding patent rights in inventions developed with federal assistance is reflected in legislation commonly referred to as the Bayh-Dole Act.⁷ To facilitate the commercialization and public availability of inventions, this act enables small businesses, nonprofit organizations, and certain contractors operating government-owned laboratories to obtain title to and profit from inventions created under federally funded research projects. In 1987, Executive Order 12591 essentially extended these privileges to large businesses. To obtain these rights, a contractor must follow certain reporting requirements, including

⁷ 35 U.S.C. § 200 *et seq.*

notifying the funding agency of an invention, informing the agency that it intends to take title to the invention, filing a patent application, and providing the government a royalty-free license. The government may acquire title to the invention if the contractor fails to follow these requirements.

DOD's policy is to acquire only the technical data, and the rights in that data, necessary to satisfy DOD's needs. Toward that end, contracting officers, among other things, are to specify the data DOD needs at the beginning of an effort and negotiate rights to that data commensurate with the government's needs. In general, the government obtains unlimited rights when technical data were developed or created exclusively with government funds, government purpose rights when the data were created with mixed funding, and limited rights when the data were created exclusively at private expense.

DOD personnel used the standard intellectual property clauses more frequently than any other clauses we evaluated. Overall, DOD personnel included the standard patent clause in 25 agreements and included the standard data rights clause in 19 agreements (see table 10). The standard clauses were generally incorporated in agreements awarded to traditional defense contractors; only one of the agreements awarded to commercial firms included the standard contract provisions. For agreements that used tailored clauses, DOD generally extended the time frames for the contractor to provide such rights, acquired more limited rights, or in certain cases, declined the rights altogether.

The government encourages the use of inventions in performing its contracts and may allow the contractor to infringe upon patents if it is believed necessary. To ensure that work under a contract is not stopped by allegations of patent infringement, the use of an authorization and consent clause enables a contractor to use patented inventions in executing the contract; in turn, the patent owner may seek monetary compensation in the U.S. Court of Federal Claims from the government. In 23 agreements, DOD personnel included the standard provision or a tailored clause providing such authorization.

Appendix I
Treatment of Selected Issues Under Section
845 Agreements

Table 10: Patent and Data Right Approaches

FAR clause	Intent	Number of agreements by approach		
		Cited FAR clause	Used tailored clause	Did not address
Patent rights				
52.227-11: Patent rights—retention by contractor (applies to small business and nonprofit organizations)	Clauses implement the Bayh-Dole Act, the purpose of which is to promote the use of inventions arising in federally funded research in the commercial marketplace and to provide the government with licenses to such inventions. Small businesses are generally provided more time to elect whether to retain title to inventions and are subject to fewer reporting requirements.	25	71	1
52.227-12: Patent rights—retention by contractor (applies to firms that are not small businesses or nonprofit organizations)				
52.227-13: Patent rights—Acquisition by the government (generally applies to work performed outside of the United States)				
Data rights				
52.227-14: Rights in data—general	Provides for the allocation of data rights under a contract. If the government funds the effort, the government generally is provided unlimited data rights. Clause may be tailored when the contractor contributes substantial funds or resources. DOD components are generally required to use the related Defense Federal Acquisition Regulation Supplement clauses.	19 ^a	78	0
Other related clauses				
52.227-1: Authorization and consent	Clause authorizes the contractor to use patented inventions and protects the government from work stoppage due to claims of patent infringement. The government generally assumes liability for patent infringement.	20	3	74

^aIncludes agreements that cited applicable Defense Federal Acquisition Regulation Supplement provisions.

Source: Our analysis.

Government Property Administration

Government property includes not only that property directly furnished by the government to the contractor, but also the property acquired by the contractor to which the government has title. The DOD Inspector General

reported that contractors had custody of about \$91 billion of government property in fiscal year 1997. The Federal Acquisition Regulation prescribes the policies and procedures for providing government property to contractors, including the contractor's use, management, and disposal of the property. Contractors have expressed concerns that DOD's approach to government property administration involves excessive documentation and oversight, thereby increasing the cost of performing DOD contracts. DOD, the General Services Administration, and the National Aeronautics and Space Administration, proposed a change to the regulations in January 2000 that is intended to simplify procedures, reduce recordkeeping, and eliminate requirements related to government property administration. Under this change, contractors will be provided the option of managing government property using the same practice the contractors use to manage their own property.

In Section 845 agreements, DOD personnel used a mix of standard and tailored clauses to address government property administration (see table 11). Eleven agreements with traditional defense firms included the standard contract provision. Forty-six agreements, representing a mix of traditional defense contractors and commercial firms, included a tailored provision allowing contractors to use best commercial practices. In three agreements in which government property was provided or acquired, the agreement officer did not include a property clause.

Table 11: Government Property Approaches

FAR clause	Intent	Number of agreements by approach			
		Cited FAR clause	Used tailored clause	No property provided or acquired	Did not address
52.245-2: Government property (fixed-price contracts)	Prescribes policy and procedures for providing government property to contractors and for the contractor's use, management, accounting, and disposition of such property.	11	46	34	3
52.245-5: Government property (cost-reimbursement contracts)					

Note: Number of agreements may not total to 97 as information was not available to make a determination in all cases.

Source: Our analysis.

Subcontractor Requirements

DOD subcontractors often face the same type of government-unique requirements as prime contractors. Certain requirements, such as those aimed at increasing competition or providing the government the authority to approve a subcontract, are mainly imposed upon prime contractors. Other requirements, such as those requiring the submission of certified cost and pricing data or audits, require the prime contractor to include a similar provision in its subcontracts, if applicable.

We found that DOD's Section 845 agreements generally relaxed subcontractor-related requirements. For example, only two agreements included a clause that enables the government to review the contractor's selection of certain subcontractors. Similarly, only 5 agreements required that the prime contractor use competitive procedures to select and award subcontracts, while 15 agreements specifically authorized the prime contractors to waive competition requirements (see table 12). Unless the agreement incorporated the standard contract clause, the agreements generally did not require prime contractors to require subcontractors to comply with standard audit requirements.

Table 12: Subcontractor-Related Requirements

FAR clause	Intent	Number of agreements by approach			
		Cited FAR clause	Used tailored clause	Did not address	Not applicable
52.209-6: Protecting the government's interest when subcontracting with contractors debarred, suspended, or proposed for debarment	Prohibits federal agencies from allowing a party to participate in any procurement or nonprocurement activity if the party is debarred, suspended, or otherwise excluded.	1	0	96	0
52.244-2: Subcontracts (cost-reimbursement contracts)	Requires contractor to obtain government consent before awarding subcontracts, depending on the complexity of the effort and subcontract type and value.	2	0	75	18
52.244-5: Competition in subcontracting	Generally requires contractors to select subcontractors on a competitive basis.	0	5	87 ^a	5

Note: Number of agreements may not total to 97 as information was not available to make a determination in all cases.

^aIncludes 15 agreements in which competition requirements were specifically waived.

Source: Our analysis.

Comments From the Department of Defense



ACQUISITION AND
TECHNOLOGY

OFFICE OF THE UNDER SECRETARY OF DEFENSE

3000 DEFENSE PENTAGON
WASHINGTON DC 20301-3000

March 6, 2000

DP/DSPS

Ms. Katherine V. Schinasi
Associate Director
Defense Acquisition Issues
National Security and International Affairs Division
U.S. General Accounting Office
Washington DC 20548

Dear Ms. Schinasi:

This is the Department of Defense (DoD) response to the GAO draft report, "ACQUISITION REFORM: DoD's Guidance on Using Section 845 Agreements Could be Improved," dated February 3, 2000 (GAO Code 707381/OSD Case 1944).

I appreciate the opportunity to comment on the draft report. "Other Transactions" are a valuable tool that have been used successfully by the Department to attract innovative commercial companies that normally do not compete for our business and to test creative contracting strategies with traditional defense firms. While the use of "other transactions" has been limited, I believe we have used the authority as Congress intended.

The Department wants to nurture and encourage the creativity permitted by this authority, while assuring we protect the Government's interests in such transactions. To accomplish this, the Department published a Guide in December 1998 that addressed key areas that should be considered when using this authority. In September 1999, the USD(AT&L) initiated an effort to refine the guide and plans to issue an updated guide by April 2000. I believe this approach is consistent with GAO's recommendation for additional guidance and is further discussed in our enclosed detailed comments on the GAO recommendations.

Sincerely,

R.D. Kerrins, Jr.
Colonel, U.S. Army
Acting Director, Defense
Procurement

Enclosure:
As stated



GAO DRAFT REPORT DATED FEBRUARY 3, 2000
(GAO CODE 707381) OSD CASE 1944

"ACQUISITION REFORM: DOD'S GUIDANCE ON USING
SECTION 845 AGREEMENTS COULD BE IMPROVED"

DEPARTMENT OF DEFENSE COMMENTS
TO THE GAO RECOMMENDATIONS

RECOMMENDATION 1: The GAO recommends that the Secretary of Defense provide guidance that lays out the conditions for using Section 845 agreements and provides a framework to tailor the terms and conditions appropriate for each agreement. The GAO states that the requirements should be in place in time to assist in the deliberations on whether to extend the authority past September 30, 2001.

DOD RESPONSE: Concur. In December 1998, a Guide on the use of Section 845 "Other Transactions" was made available in the DoD Deskbook internet site. The "other transactions" reviewed by the GAO were awarded prior to the Guide being issued. In September 1999, the Under Secretary of Defense for Acquisition, Technology and Logistics, USD(AT&L), requested comments on the Guide based on experience gained during the three years the authority has been available beyond the Defense Advanced Research Projects Agency.

Extensive comments were received from both within the Department and industry associations. The comments are currently being considered for inclusion in an updated guide expected to be issued by April 2000. The updated guide will refine the conditions for using section 845 authority and refine the framework to tailor the terms and conditions appropriate for each agreement. I envision that the guide will initially be issued by a policy memorandum, that will be superceded within 90 days after issuance by a DoD instruction.

RECOMMENDATION 2: The GAO recommends that the Secretary of Defense establish and require the use of a set of metrics, including the number of commercial firms participating in Section 845 agreements, which are measurable and directly related to the agreement's use. The GAO states that the requirements should be in place in time to assist in the deliberations on whether to extend the authority past September 30, 2001.

DOD RESPONSE: Partially concur. The updated guide will include an updated definition to measure the participation of new entrants. Though the Department has not officially revised the definition of "first-time DoD contractor" established by the Director of Defense Procurement's memorandum of October 16, 1997, the Department has tracked new entrants and identified participants below the prime

ENCLOSURE

GAO DRAFT REPORT DATED FEBRUARY 3, 2000
(GAO CODE 707381) OSD CASE 1944

"ACQUISITION REFORM: DOD'S GUIDANCE ON USING
SECTION 845 AGREEMENTS COULD BE IMPROVED"

DEPARTMENT OF DEFENSE COMMENTS
TO THE GAO RECOMMENDATIONS

level to the Inspector General. In a February 2000 Report to Congress, the USD(AT&L) reported on the extent of new entrant participation. Our analysis indicates that approximately 36% of the Fiscal Year (FY) 1994-1998 agreements involved the participation of new entrants and that approximately 30% of the FY 1999 agreements involved new entrants. Of the 141 agreements awarded in FY 1994-1999, 18 or approximately 13% were awarded to new entrants as primes. Of the 475 total identified number of primes and participants (includes educational institutions, government entities and duplicative entities), 119 or 25% are considered to be new entrants. It is only reasonable to expect that the main players in weapons and weapons related prototyping will be traditional defense contractors, especially at the prime level. The Department believes the use of "other transactions" is a direct contributor to the progress made here in attracting new entrants to weapons and weapons related prototyping and will continue to track new entrants.

The Department previously explored whether there were additional metrics that are measurable and directly related to the agreement's use. We found, as the GAO draft report recognizes, that it is difficult to establish metrics that are directly related to the use of an "other transaction". In addition, many of the benefits attributed to the use of this authority do not lend themselves to quantifiable metrics. Requiring the use of a set of metrics sounds like a reasonable way to measure benefits, but could result in too much emphasis being placed on these measures while overlooking other benefits that do not lend themselves to quantifiable metrics.

Statute requires the Department to submit an annual report to Congress that addresses the extent of cost sharing from non-federal sources, the extent the use of an "other transaction" has contributed to a broadening of the technology and industrial base available for meeting DoD needs, and the extent the use of an "other transaction" has fostered within the technology and industrial base new relationships and practices that support the national security of the United States. In addition, USD(AT&L) has provided Congressionally-requested reports in February 1999 and February 2000 on the use of this authority. Our review and the GAO's review of the reported reasons for using this authority and the associated benefits, did not surface any obvious set of additional quantifiable

GAO DRAFT REPORT DATED FEBRUARY 3, 2000
(GAO CODE 707381) OSD CASE 1944

"ACQUISITION REFORM: DOD'S GUIDANCE ON USING
SECTION 845 AGREEMENTS COULD BE IMPROVED"

DEPARTMENT OF DEFENSE COMMENTS
TO THE GAO RECOMMENDATIONS

metrics that could be established that are measurable and directly related to the agreements use.

Thus, the measures that DoD will continue to track include the extent of new entrant participation, participant cost-share, and the statutorily required reporting of impacts on the technology and industrial base and new relationships and practices. DoD will continue to explore whether there are additional metrics that can be added later to the guide that are measurable and directly related to the agreements use.

GAO Contacts and Staff Acknowledgments

Contact

Timothy J. DiNapoli (202) 512-3665

Acknowledgments

John K. Harper, Dwight D. Rowland, Clifton E. Spruill, John P. K. Ting, John Van Schaik, and William T. Woods also made significant contributions to this report.

Ordering Information

The first copy of each GAO report is free. Additional copies of reports are \$2 each. A check or money order should be made out to the Superintendent of Documents. VISA and MasterCard credit cards are accepted, also.

Orders for 100 or more copies to be mailed to a single address are discounted 25 percent.

Orders by mail:

U.S. General Accounting Office
P.O. Box 37050
Washington, DC 20013

Orders by visiting:

Room 1100
700 4th St. NW (corner of 4th and G Sts. NW)
U.S. General Accounting Office
Washington, DC

Orders by phone:

(202) 512-6000
fax: (202) 512-6061
TDD (202) 512-2537

Each day, GAO issues a list of newly available reports and testimony. To receive facsimile copies of the daily list or any list from the past 30 days, please call (202) 512-6000 using a touchtone phone. A recorded menu will provide information on how to obtain these lists.

Orders by Internet:

For information on how to access GAO reports on the Internet, send an e-mail message with "info" in the body to:

info@www.gao.gov

or visit GAO's World Wide Web home page at:

<http://www.gao.gov>

To Report Fraud,
Waste, or Abuse in
Federal Programs

Contact one:

- Web site: <http://www.gao.gov/fraudnet/fraudnet.htm>
- e-mail: fraudnet@gao.gov
- 1-800-424-5454 (automated answering system)